



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:

Confirmation No. 6744

Karen Ann BRADLEY et al.
(Appellants)

Group Art Unit No.: 2154

Examiner: Kenny S. LIN

Serial No.: 09/727,567

Filed: November 30, 2000

For: TIME-BASED MONITORING OF SERVICE LEVEL AGREEMENTS

Mail Stop Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPELLANTS' APPEAL BRIEF

Sir:

Applicants/Appellants hereby submit this Appeal Brief in support of the Notice of Appeal filed on August 25, 2005 and pursuant to 37 C.F.R. §41.37.

I. REAL PARTY IN INTEREST

Cisco Systems, Inc., which owns the assignee Cisco Technology, Inc., both of San Jose, California, are the real parties in interest.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: **Mail Stop Appeal Brief – Patents**, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

On: October 25, 2005

by


Teresa Austin

II. RELATED APPEALS AND INTERFERENCES

Appellants are unaware of any related appeals or interferences.

III. STATUS OF CLAIMS

Claims 1-2, 4-8, 10-14, and 16-21 are pending in this application, were finally rejected and are the subject of this appeal. Claims 3, 9, and 15 were canceled during prosecution. Claim 22 is canceled in the Amendment under 37 C.F.R. § 41.33(b)(1) filed concurrently herewith.

IV. STATUS OF AMENDMENTS

An Amendment under 37 C.F.R. § 41.33(b)(1) is filed concurrently herewith to cancel Claim 22, and should be entered because the cancellation of Claim 22 does not affect the scope of any other pending claim.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Claims 1, 7, 13, and 19 are independent. These independent claims recite similar features, except in the context of a method, a computer-readable medium (Claim 7), and a network device (Claims 13, 19.) Claim 1 is the broadest main independent claim and the focus of the remarks herein.

The independent claims provide a solution to a problem arising in the management of network systems. In general, a service provider, often referred to as an Internet Service Provider (ISP), supplies the services that are needed to allow a company to network and share its resources between different remote sites. (Specification, page 3, lines 1-10.)

A Service Level Agreement is a contract between the supplier of a service (the Service Provider) and the company or companies that use that service (the Customer). In general, a

Service Level Agreement sets out the levels of service that will be offered, preferably in quantitative terms, and any obligations that are required by the Customer of the service. In today's market, Service Level Agreements have become an important tool for differentiating the quality of service that is to be guaranteed on part of particular Service Providers. Further, since a Customer and a Service Provider typically enter a business agreement, the acceptability of the service levels received by the Customer is usually related to particular monetary terms. However, from a Customer's standpoint, determining the accountability of a Service Provider and the acceptability of the services provided by the Service Provider remains problematic because there is a lack of tools that the Customer can use to determine whether a Service Provider is in compliance with the Service Level Agreements. (Specification, pages 3-4, lines 11-14; page 3, line 21 to page 4, line 5; page 4, lines 16-20.)

To address these problems, the independent claims in the present application provide a way to monitor Service Level Agreements (SLAs) and Service Level Contracts (SLC). A Service Level Contract is a contract agreement between a service provider and a customer that contains one or more specific SLAs and defines the time range or interval for which the corresponding SLAs apply. (Specification, page 10, lines 9-12; page 19, lines 16-18.) A set of metric tests are provided for an SLA that define at least the type of information that is being collected, how often the information is to be collected, and what constitutes a violation of the contract. The set of metric tests may be defined by standardized templates that are approved by the Service Provider for verifying the level of service that is being provided to a Customer. In certain embodiments, the standardized templates may further include a group of metric test parameters that define a range of values that may be used for verifying the level of service that is being provided to a Customer. (Specification, page 11, lines 7-19.)

In particular, Claim 1 recites receiving a schema that provides a configuration for monitoring a service level contract between a service provider and a particular customer. Table 2, page 20 of the specification, provides an example of the structure of a SLC schema, and FIG. 7 provides an example of how the various components that define a SLC are related to each other and how the SLC and the SLAs may be modeled. The schema comprises data defining one or more metric tests for monitoring the level of network service being provided to the particular customer. Each metric test measures a level of service of a particular type of network operation and includes a set of one or more threshold values that correspond to a range of acceptable performance for the particular type of network operation. Table 4, page 23 of the specification, provides an example of the structure of a SLA component that defines a metric test, such as, for example, a ICMP, UDP, HTTP, DNS, or VoIP metric tests for measuring the level of ICMP, UDP, HTTP, DNS, and VoIP types of network operations. Table 5 at page 24, Table 8 at page 27, Table 11 at page 30, Table 14 at page 33, and Table 17 at page 37 provide examples of the structures of SLA components that define ICMP, UDP, DNS, HTTP, and VoIP metric tests, respectively. Examples of threshold values that correspond to ranges of acceptable performance for ICMP, UDP, DNS, HTTP, and VoIP network operations are provided at pages 27, 30, 33, 36, and 39, respectively. The schema also comprises information defining a specific time range for when the one or more metric tests are to be performed. Table 3, page 22 of the specification, provides an example of the structure of a component of an SLC schema that defines specific time ranges for when metric tests are to be performed. Examples of time ranges for when metric tests are to be performed are also provided at page 22 of the specification.

Claim 19 is a means-plus-function claim. The means for receiving a schema that provides a configuration for monitoring a service level contract between a service provider and a

particular customer, and the means for distributing the one or more metric tests to one or more agents all correspond to the SLM server 100 and its functions as illustrated in FIGs. 2A and 2B and described in the specification at pages 9-19.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Claims 1, 4, 6-7, 10, 12-13, 16, 18-19, and 21 stand rejected as allegedly unpatentable under 35 U.S.C. § 103(a) over Shurmer et al., U.S. Patent No. 5,974, 237 (hereinafter “SHURMER”) in view of St. Laurent, *Describing Your Data: DTDs and XML Schemas*, December 1, 1999, O'Reilly XML.com (hereinafter “LAURENT”).

2. Claims 2, 8, 14, 20, and 22 stand rejected as allegedly unpatentable under 35 U.S.C. § 103(a) over SHURMER in view of LAURENT and further in view of “Official Notice”.¹

3. Claims 5, 11, and 17 stand rejected as allegedly unpatentable under 35 U.S.C. § 103(a) over SHURMER in view of LAURENT and further in view of Schuster et al., U.S. Patent No. 6,363,053 (hereinafter “SCHUSTER”).

VII. ARGUMENT

A. Introduction

To establish a *prima facie* case of obviousness under 35 U.S.C. §103(a), the references cited and relied upon must teach or suggest all the claim limitations. In addition, a sufficient factual basis to support the obviousness rejection must be proffered. *In re Freed*, 165 USPQ 570 (CCPA 1970); *In re Warner*, 154 USPQ 173 (CCPA 1967); *In re Lunsford*, 148 USPQ 721 (CCPA 1966). The final Office Action in the present application fails to satisfy these criteria for the

rejections of the independent claims, including Claims 1, 7, 13, and 19. (The following discussion focuses on Claim 1; the same arguments apply to all independent claims.)

Claims 1-2, 4-8, 10-14, and 16-21 include one or more limitations that are not taught or suggested by SHURMER, LAURENT, SCHUSTER, or the Official Notice taken by the Examiner. A sufficient factual basis has not been proffered during the prosecution of the present application to support the rejection of Claims 1, 4, 6-7, 10, 12-13, 16, 18-19, and 21 under 35 U.S.C. § 103(a) over SHURMER in view of LAURENT, the rejection of Claims 2, 8, 14, and 20 under 35 U.S.C. § 103(a) over SHURMER in view of LAURENT and further in view of Official Notice, and the rejection of Claims 5, 11, and 17 under 35 U.S.C. § 103(a) over SHURMER in view of LAURENT and further in view of SCHUSTER. Therefore, the rejections are clearly erroneous,² and should be reversed.

B. Claims 1, 4, 6-7, 10, 12-13, 16, 18-19, and 21 Are Patentable Over
SHURMER in view of LAURENT

Claims 1, 4, 6-7, 10, 12-13, 16, 18-19, and 21 are patentable under 35 U.S.C. § 103(a) over SHURMER in view of LAURENT because Claims 1, 4, 6-7, 10, 12-13, 16, 18-19, and 21 include one or more features that are not taught or suggested SHURMER and LAURENT.

1. INDEPENDENT CLAIM 1

Claim 1 is directed to a method for monitoring a level of network service provided by a

¹ The rejection of Claim 22 is moot, and not addressed herein, because Claim 22 is canceled in an amendment filed concurrently herewith under 37 C.F.R. §41.33(b)(1).

² The Appellants sought to resolve the clear error herein by filing a Pre-Appeal Brief Request for Review pursuant to the OG Notice of 12 July 2005 (hereinafter the "OG Notice") that introduced a new Pre-Appeal Brief Conference Pilot Program. In numbered paragraph 4, the OG Notice limits a pre-appeal brief request to 5 pages, but expressly states that "[a]pplicants are encouraged to refer to arguments already of record rather than repeating them in the request. This may be done by simply referring to a prior submission by paper number and the relevant portions thereof." However, in the Notice of Panel Decision From Pre-Appeal Brief Review mailed on October 5, 2005 in the present application, a panel dismissed the Appellants' request as improper because "[t]he request contains more than 5 pages since it refers to pages of the arguments of the previous reply. Therefore, the total pages of the request exceed 5 pages." The panel's interpretation of the 5-page limit requirement is incorrect and does not advance the goal of the Pilot Program to spare added time, expenses, and resources of both appellants and the Honorable Board. The panel's decision should be reversed.

service provider that comprises the features of:

receiving a schema that provides **a configuration for monitoring a service level contract between the service provider and a particular customer**, wherein the schema comprises:

data defining one or more metric tests for monitoring the level of network service being provided to the particular customer by the service provider, each said metric test measuring a level of service of a particular type of network operation, and including a set of one or more threshold values that correspond to a range of acceptable performance for the particular type of network operation, and information defining a specific time range for when the one or more metric tests are to be performed;

...

SHURMER and LAURENT, whether taken alone or in combination, do not teach or suggest the above features of Claim 1.

a. Service level contract between a service provider and a customer

Claim 1 comprises the feature of receiving a schema that provides **a configuration for monitoring a service level contract between a service provider and a customer**. The final Office Action asserts, in page 3, numbered paragraph 7a, that this feature of Claim 1 is described in col. 7, lines 42-46, col. 8, lines 3-14, and col. 14, lines 39-48 of SHURMER. This is incorrect.

First, nothing in SHURMER teaches anything that may be considered equivalent to a service provider and a customer as featured in Claim 1. In general, SHURMER describes a method of monitoring a communications network comprising a plurality of node equipment, in which performance parameters of individual components of node equipment are used to determine an overall performance parameter for the node equipment. (SHURMER, Abstract.) More specifically, SHURMER describes “a data monitoring apparatus for monitoring operational parameters of a communications network comprising a plurality of interconnected network elements, in which a **plurality of users** can each contemporaneously perform at least one monitoring session, each monitoring a respective operational parameter or set of operational

parameters of said network elements.” (Col. 2, lines 29-36; emphasis added). The data monitoring apparatus in SHURMER executes a management application for managing the monitoring sessions that is capable of:

for each monitoring session compiling a signal describing a list of operational parameters to be monitored;
sending said signal to a plurality of element servers which obtain data signals from the network elements; and
receiving said data signals containing data relating to said operational parameters and **arranging said data signals into a form suitable for presentation of said operational parameters in a graphical form.**

(Col. 2, lines 50-61; emphasis added.) “Operational parameters to be monitored in the monitoring session are input in step 140, and in steps 141 and 142 component and element signals corresponding to selected network elements and components of those elements are collected **for each user.**” (SHURMER, col. 20, lines 52-56; emphasis added.) Thus, while SHURMER may be describing a method and apparatus for monitoring a network that includes a plurality of network elements, the monitoring in SHURMER is carried out in monitoring sessions performed by individual USERS, where in each monitoring session values for a list of operational parameters of the network elements specified by a user are collected and arranged in graphical form for presentation to the user. Nothing in SHURMER teaches or suggests that any monitoring is performed from the perspective a customer that is receiving a service from a service provider.

Second, SHURMER does not describe or suggest a service level contract between a service provider and a customer. The passages from SHURMER cited in the Office Action (col. 7, lines 42-46, col. 8, lines 3-14, and col. 14, lines 39-48) as allegedly showing a service level contract do not describe anything that is equivalent to such a contract.

For example, in col. 7, lines 42-46, SHURMER states:

By monitoring the element signals of each network element of interest in relation to a selected performance or service parameter, selected at the user interface 24, the user may identify problems or inefficiencies in the communications network.

No service level contract between a service provider and a customer is described in the above passage. Further, no monitoring of such a contract is described either.

In col. 8, lines 3-14, SHURMER states:

Monitoring of a communications network at the network or service levels may be particularly useful as a diagnostic tool for improving the speed at which a complaint or query received from a customer of a communications network service may be investigated, and to identify particular elements of the network which are problematic to **one or more customers of the network**. Additionally, monitoring of operational parameters at the network or service levels may enable non-technical business manager users to identify patterns of customer usage of a network, with a view to developing new customer service packages to be supported on the network. (Emphasis added.)

While the above passage may be describing monitoring a network or service level in response to a complaint by a user, nothing in the above passage describes monitoring a **service level contract between a service provider and a particular customer**. The claims in the present application relate to determining compliance by a service provider with a service level contract, so a proper reference for rejecting the claims **MUST** disclose or suggest a **CONTRACT**. In the above passage from SHURMER, service levels are monitored for identifying slow network elements or broad patterns of customer usage, but not as part of a service level contract between a service provider and a particular customer as featured in Claim 1. Furthermore, while the above passage may be using the term “customers”, the context of the SHURMER disclosure, when read in its entirety, makes it abundantly clear that the “customers” are users connected to a network, and **NOT** customers that use services provided by a service provider as featured in Claim 1.

In col. 14, lines 39-48, SHURMER states:

A Service Associated Network Spec Element object defines a set of performance parameters to be monitored from individual components of network elements with respect to a set of services. The Service Associated Network Spec Element object forms the basis of the service level monitoring of a network. The performance of a network element can be measured with respect to a specified service which will only measure the performance data on the individual component parts of the node element or switch, that the service connection traverses.

Nothing in the above passage describes a service level contract between a service provider and a particular customer. Neither the passages cited above, nor any other passage in SHURMER, describe a service level contract between a service provider and a particular customer as featured in Claim 1.

Further, SHURMER does not describe or suggest that any service level parameters may be specified for monitoring in a service level contract between a service provider (such as, for example, an ISP) and a customer (such as, for example, a company). Fundamentally, SHURMER describes monitoring of network parameters as they relate to the performance of the network from the perspective of a user. In contrast, Claim 1 of the present application relates to a monitoring compliance with a service level contract at a different level, at which a service provider, such as an ISP, provides services to a customer, such as a company or a business organization.

For the above reasons, SHURMER does not teach, describe, or suggest the feature of Claim 1 of a configuration for monitoring a service level contract between a service provider and a particular customer. Further, LAURENT does not describe this feature either. Thus, any combination of SHURMER and LAURENT necessarily fails to disclose or make obvious all features of independent Claim 1.

b. Metric tests, threshold values, and ranges of acceptable performance

In Claim 1, a schema that provides a configuration for monitoring a service level contract between the service provider and a particular customer comprises:

data defining one or more metric tests for monitoring the level of network service being provided to the particular customer by the service provider, **each said metric test measuring a level of service of a particular type of network operation**, and including **a set of one or more threshold values** that correspond to **a range of acceptable performance for the particular type of network operation**; ...

In alleging that SHURMER describes the above feature of Claim 1, the Examiner does not specify what exactly in SHURMER is equivalent to a **metric test for measuring a level of service of a particular type of network operation**, and to a **set of one or more threshold values that correspond to a range of acceptable performance for the particular type of network operation** as featured in Claim 1.

Instead, in page 3, numbered paragraph 7b, the Final Office Action states literally:

data defining one or more metric tests for monitoring the level of network service being provided to the particular customer by the service provider, each said metric test measuring a level of service of a particular type of network operation, and including a set of one or more threshold values that correspond to a range of acceptable performance for the particular type of network operation (col. 1, lines 47-60, col. 6, lines 57-67, col. 7, lines 1-9, col. 8, lines 3-14, col. 14, lines 39-48, col. 16, lines 39-43, col. 20, lines 52-56, col. 21, lines 18-25, 50-53, col. 25, lines 57-67, col. 26, lines 1-3, 40-52).

The non-bolded portion of the above passage is a verbatim recitation of the features of Claim 1.

The **bolded portion** is a laundry list of citations to passages from SHURMER that are not identified or qualified in any particular manner; the bolded portion does not specify what in these numerous passages is considered by the final Office Action as equivalent to the above features of Claim 1.

In an Office Action “the particular part relied on must be designated as nearly as practicable ... The pertinence of each reference, if not apparent, must be clearly explained ...”

(MPEP §707, citing 37 C.F.R. §1.104(c)(2)), and “the particular figure(s) of the drawings(s), and/or page(s) or paragraph(s) of the reference(s), and/or any relevant comments briefly stated should be included.” (MPEP §707.) The above laundry list of citations to SHURMER does not provide the Appellants with adequate notice or reasonable particularity with respect to the basis of the rejection of Claim 1. The Appellants cannot identify any structure or functions in the cited passages from SHURMER that correspond to the features of Claim 1 of one or more metric tests measuring a level of service of a particular type of network operations, where a metric test includes a set of one or more threshold values that correspond to ranges of acceptable performances for particular type of network operations.

The only comment in the final Office Action regarding the above features of Claim 1 is provided in the section titled “Response to Arguments”, which starts at page 11. Specifically, in responding to arguments the Appellants presented in a reply to a previous office action, in the middle of page 12 the final Office Action states:

As to point (3) Shurmer taught to define metric tests by inputting a set of operational parameters to be monitored (e.g. **threshold values to be compared or measured**; col. 25, lines 57-67, col. 26, lines 1-3, 40-52). The operational parameter or sets of operational parameters relate to the performance of particular network operations (abstract, col. 1, lines 47-63, col. 21, lines 18-25, 50-53). (Emphasis added.)

Thus, the Examiner seems to assert that operation parameters described in col. 25, line 57 to col. 26, line 3, in SHURMER correspond at the same time to ALL of a metric test, a set of threshold values, and the ranges of acceptable parameters featured in Claim 1. This is clear error.

In col. 25, line 57 to col. 26, line 3, SHURMER states:

Other examples of operation parameters which can be monitored at the service level include;
monitor the bandwidth utilisation for a connection per direction
monitor cell discard due to policing or a connection per direction.
Associated Service Level Functions

At an associated service level, which is a sub-set of the service level, the performance of individual components supporting a connection can be inspected. At the associated service level, individual connections can be traced through the network. A user can monitor the performance of a switch with respect to a particular connection, without having to understand the internal architecture of the switch equipment.

The above passage does not describe or suggest metric tests that include threshold values corresponding to ranges of acceptable performance as featured in Claim 1.

Further, in col. 26, lines 40-52, SHURMER continues to state:

Examples of operational parameters at the associated service level comprise;
monitor bandwidth utilisation per direction for the links that the connection
traverses
monitor bandwidth utilisation per direction per quality of service for the links that
the connection traverses
monitor VCI/VPI space utilisation for the links that the connection traverses
monitor cell discard per quality of service due to congestion
monitor queue fill per priority for each switch component that the connection
traverses.

The above passage does not describe or suggest any of metric tests, threshold values, ranges of acceptable performance, or any combinations thereof.

An operational parameter, which can be monitored at a service level, such as usage of data per connection per user, bandwidth utilization of a connection, and cell discards (see SHURMER, col. 25, lines 45-46 and 57-62), is not a metric **test** for monitoring the level of network service specified in a service level contract between a service provider and a particular customer, as recited in Claim 1. Further, such a parameter is not a threshold value that corresponds to a **range of acceptable performance** for a particular type of network operation either. Nothing in SHURMER describes values that correspond to a range of acceptable performance for a service level, as recited in Claim 1.

The Office's policy of applying a "broadest reasonable interpretation" of a reference to claim terms do not permit the Office to ignore express terms of a claim. When the terms "metric

test”, “threshold values” and “ranges of acceptable performance” appear in a claim, the Office may not treat ALL these terms as equivalent to a single term of “operational parameter,” or whatever else happens to appear in a reference; the references MUST show or suggest what is claimed. Further, a reference is not made of clay that can be stretched and molded into whatever the Office wants the reference to say, in the guise of “interpreting” the reference and claims in “broad” terms.

For the above reasons, SHURMER does not teach, describe, or suggest the feature of Claim 1 of data defining one or more metric tests for monitoring the level of network service being provided to the particular customer by the service provider, each said metric test measuring a level of service of a particular type of network operation, and including a set of one or more threshold values that correspond to a range of acceptable performance for the particular type of network operation. Further, LAURENT does not describe this feature either. Thus, any combination of SHURMER and LAURENT necessarily fails to disclose or make obvious all features of independent Claim 1.

For all the foregoing reasons, the rejection of Claim 1 under 35 U.S.C. §103(a) is unsupported in the cited references. Reversal of the rejection is respectfully requested.

2. INDEPENDENT CLAIMS 7, 13, AND 19

Independent Claims 7, 13, and 19 have been rejected as allegedly unpatentable under 35 U.S.C. § 103(a) over SHURMER in view of LAURENT.

Claims 7, 13, and 19 include features similar to the features of Claim 1 discussed above. For the reasons discussed above with respect to Claim 1, the rejections of Claims 7, 13, and 19 are unsupported by the cited references. Reversal of the rejections of Claims 7, 13, and 19 under 35 U.S.C. § 103(a) is respectfully requested.

3. DEPENDENT CLAIMS 4, 6, 10, 12, 16, 18, AND 21

Dependent Claims 4, 6, 10, 12, 16, 18, and 21 have been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over SHURMER in view of LAURENT.

Claims 4, 6, 10, 12, 16, 18, and 21 are each dependent upon one of independent Claims 1, 7, 13, and 19, and thus include each and every feature of the base independent claim. For the reasons stated above with respect to Claims 1, 7, 13, and 19, the rejections of Claims 4, 6, 10, 12, 16, 18, and 21 are unsupported by the cited references. Reversal of the rejections of Claims 4, 6, 10, 12, 16, 18, and 21 under 35 U.S.C. § 103(a) is respectfully requested.

C. Claims 2, 8, 14, and 20 Are Patentable Over SHURMER in view of LAURENT and further in view of “Official Notice”

It is respectfully submitted that Claims 2, 8, 14, and 20 are patentable under 35 U.S.C. § 103(a) over SHURMER in view of LAURENT and further in view of Official Notice because Claims 2, 8, 14, and 20 include one or more features that are not taught or suggested SHURMER, LAURENT, or the taken “Official Notice.”

1. CLAIM 2

Claim 2 comprises the features of:

for each metric test defined in the schema, **determining whether result information for that metric test is within the set of one or more threshold values included in that metric test;** and
creating and storing reporting information that indicates whether the customer is actually receiving, during the specific time range, the level of network service offered by the service provider in the service level contract, said reporting information based on said determinations.

SHURMER, LAURENT, and any “Official Notice” do not teach or suggest the above features of Claim 2.

a. Determining whether result information for a metric test is within the set of one or more threshold values included in that metric test

As discussed above with respect to Claim 1, the cited references do not teach or suggest metric tests for measuring the level of a service of a particular type of network operation, or a set of threshold values included in such metric tests that correspond to a range of acceptable performance for the particular type of network operation. Thus, cited references cannot possibly describe the feature of Claim 2 of determining whether result information for that metric test is within the set of one or more threshold values included in that metric test.

Further, in rejecting Claim 2, on page 8, numbered paragraph 15a, the final Office Action states:

a. For each metric test defined in the schema, determining whether result information for that metric test is within the range of acceptable values defined by the set of one or more threshold values included with that metric test (It is inherent that the result information is within the range of acceptable values since the monitoring is within the range of operational parameters input by the users).

The above statement is insufficient to establish prior disclosure of the feature of Claim 2 of determining whether result information for that metric test is within the set of one or more threshold values included in that metric test.

To establish a *prima facie* case of obviousness under 35 U.S.C. §103(a), the references cited and relied upon must teach or suggest all the claim limitations. However, the mere statement that

It is inherent that the result information is within the range of acceptable values since the monitoring is within the range of operational parameters input by the users

is insufficient to establish a prior disclosure of the above feature of Claim 2 for at least three reasons.

First, the above feature of Claim 2 refers to making a determination whether result information for a particular metric test is within the threshold values included in that metric test. In contrast, the above statement in the Office Action flat out states that any result information inherently, i.e. ALWAYS, will be within a range of acceptable values; hence, there is no need to make any determination at all.

Second, the above statement in the Office Action does not specify the reference which allegedly establishes that “monitoring is within the range of operational parameters input by the users.” It seems that the Office Action is referring to “operational parameters” being input by a user as described in the SHURMER reference. If that is the case, however, the final Office Action does not specify a location in SHURMER.

Third, even in the context of SHURMER, the statement that “the monitoring is within the range of operational parameters input by the users” is not true. If that statement were true, there would be no reason to perform any monitoring because any results that are returned from such monitoring will inherently be within what the user specified in the first place. It seems that the final Office Action is confusing operational parameters specified by a user with values for these parameters that are returned from a network element during a monitoring session. While SHURMER may be describing that a user may specify operational parameters for each monitoring session (see col. 20, lines 48-56), nothing in SHURMER teaches or suggests what the values for such parameters returned in particular monitoring session may or may not be.

For the above reasons, the final Office Action has failed to establish a prior disclosure of the feature of Claim 2 of determining whether result information for that metric test is within the set of one or more threshold values included in that metric test.

b. The Official Notice taken in the rejection of Claim 2 is improper

“Official notice unsupported by documentary evidence should only be taken by the

examiner where **the facts asserted** are to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known.” (MPEP §2144.03; emphasis added.) As noted by the Court of Claims and Patent Appeals in *In re Ahlert*, the **notice of facts** beyond the record which may be taken by the examiner must be “**capable of such instant and unquestionable demonstration as to defy dispute**” (*In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970), citing *In re Knapp Monarch Co.*, 296 F.2d 230, 132 USPQ 6 (CCPA 1961)). Thus, when rejecting a claim, an Office Action is allowed to take an Official Notice of well-known facts. However, as the case law clearly shows that such Official Notice is limited to FACTS.

In the present case, the Official Notice taken by the final Office Action to reject Claim 2 is improper because it states a conclusion of law. Specifically, in the first paragraph on page 9, the final Office Action states:

Official Notice is taken that **it is obvious** to create and store reports base on obtained test results and determine various statistics using the results. (Emphasis added; grammatical errors in the original.)

The above statement is not a FACT, but a conclusion of law because it conclusively states that a certain element in a feature of Claim 2 is obvious. Thus, the above Official Notice is improper.

Further, to the extent that the above Official Notice refers to any conclusions of obviousness, the Appellants have timely traversed any such conclusions in the Reply to Office Action With Amendment filed in the present application on April 4, 2005. For these reasons, the Official Notice taken by the final Office Action in the rejection of Claim 2 is improper.

For all the foregoing reasons, the rejection of Claim 2 under 35 U.S.C. §103(a) over SHURMER in view of LAURENT and further in view of Official Notice is unsupported in the cited references. Reversal of the rejection is respectfully requested.

2. CLAIMS 8, 14, AND 20

Similarly to Claim 2, Claims 8, 14, and 20 have been rejected as allegedly unpatentable under 35 U.S.C. § 103(a) over SHURMER in view of LAURENT and further in view of Official Notice.

Claims 8, 14, and 20 include features similar to the features of Claim 2 discussed above. For the reasons stated above with respect to Claim 2, the rejections of Claims 8, 14, and 20 are unsupported by the cited references. Reversal of the rejections of Claims 8, 14, and 20 under 35 U.S.C. § 103(a) is respectfully requested.

D. Claims 5, 11, and 17 Are Patentable Over SHURMER in view of LAURENT and further in view of SCHUSTER

Claims 5, 11, and 17 are rejected as allegedly unpatentable under 35 U.S.C. § 103(a) over SHURMER in view of LAURENT and further in view of SCHUSTER.

Claims 5, 11, and 17 are each dependent upon one of independent Claims 1, 7, and 13, and thus include each and every feature of the base independent claim. Furthermore, in rejecting Claims 5, 11, and 17 the final Office Action relies explicitly on SHURMER and LAURENT, and not on SCHUSTER, to support prior disclosure of the features discussed above with respect to Claim 1. To the extent each of Claims 5, 11, and 17 incorporates the features of its base independent claim, Claims 5, 11, and 17 are allowable for the reasons given above for Claims 1, 7, and 13. Thus, the rejections of Claims 5, 11, and 17 are unsupported by the cited references at least for the reasons stated above with respect to Claims 1, 7, and 13. Reversal of the rejections of Claims 5, 11, and 17 under 35 U.S.C. § 103(a) is respectfully requested.

VIII. CONCLUSION AND PRAYER FOR RELIEF

Based on the foregoing, it is respectfully submitted that the rejection of Claims 1-2, 4-8, 10-14, and 16-21 lacks the requisite legal and factual basis. Appellants therefore respectfully request that the Honorable Board reverse the rejections of Claims 1, 4, 6-7, 10, 12-13, 16, 18-19, and 21 under 35 U.S.C. § 103(a) over SHURMER in view of LAURENT, the rejections of Claims 2, 8, 14, and 20 under 35 U.S.C. § 103(a) over SHURMER in view of LAURENT and further in view of "Official Notice", and the rejections of Claims 5, 11, and 17 under 35 U.S.C. § 103(a) over SHURMER in view of LAURENT and further in view SCHUSTER.

The fee of \$500 under 37 C.F.R. § 41.20(b)(2) is enclosed. If the fee is missing or insufficient, the Director is hereby authorized to charge any applicable fee to our Deposit Account No. 50-1302.

Respectfully submitted,

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CLAIMS APPENDIX

1 1. A method for monitoring a level of network service provided by a service provider,
2 the method comprising the computer-implemented steps of:
3 receiving a schema that provides a configuration for monitoring a service level
4 contract between the service provider and a particular customer, wherein the
5 schema comprises:
6 data defining one or more metric tests for monitoring the level of network
7 service being provided to the particular customer by the service
8 provider, each said metric test measuring a level of service of a
9 particular type of network operation, and including a set of one or
10 more threshold values that correspond to a range of acceptable
11 performance for the particular type of network operation, and
12 information defining a specific time range for when the one or more metric
13 tests are to be performed; and
14 distributing the one or more metric tests to one or more agents, wherein the one or
15 more agents configure devices associated with the network to automatically
16 perform the one or more metric tests during the specific time range, and
17 receive result information from the devices performing the one or more metric
18 tests.

1 2. The method recited in claim 1, further including the steps of:
2 for each metric test defined in the schema, determining whether result information for
3 that metric test is within the set of one or more threshold values included in

4 that metric test; and
5 creating and storing reporting information that indicates whether the customer is
6 actually receiving, during the specific time range, the level of network service
7 offered by the service provider in the service level contract, said reporting
8 information based on said determinations.

1 4. The method recited in claim 1,
2 said schema being based on Extensible Markup Language (XML), and wherein the
3 schema models the service level contract.

1 5. The method recited in claim 1, further comprising the steps of:
2 generating, at a server, interface data for defining the schema for monitoring the
3 service level contract; and
4 communicating the interface data to a client that is remote from said server, wherein
5 the interface data allows users to configure specific times for monitoring the
6 level of service that is being provided by the service provider, and to configure
7 the set of one or more threshold values included with each metric test.

1 6. The method recited in claim 1, wherein:
2 the one or more agents configure the devices to perform the one or more metric tests
3 only within the specific time range.

1 7. A computer readable medium carrying sequences of instructions for monitoring a
2 level of network service provided by a service provider, the sequences of instructions
3 including instructions for performing the steps of:
4 receiving a schema that provides a configuration for monitoring a service level
5 contract between the service provider and a particular customer, wherein the
6 schema comprises:
7 data defining one or more metric tests for monitoring the level of network
8 service being provided to the particular customer by the service
9 provider, each said metric test measuring a level of service of a
10 particular type of network operation, and including a set of one or
11 more threshold values that define a range of acceptable values for the
12 particular type of network operation, and
13 information defining a specific time range for when the one or more metric
14 tests are to be performed; and
15 distributing the one or more metric tests to one or more agents, wherein the one or
16 more agents configure devices associated with the network to perform the one
17 or more metric tests during the specific time range and receive result
18 information from the devices performing the one or more metric tests.

1 8. The computer readable medium recited in claim 7, further comprising instructions for
2 performing the steps of:
3 for each metric test defined in the schema, determining whether result information for
4 that metric test is within the range of acceptable values defined by the set of

5 one or more threshold values included with that metric test; and
6 creating and storing reporting information that indicates whether the customer is
7 actually receiving, during the specific time range, the level of network service
8 offered by the service provider in the service level contract, said reporting
9 information based on said determinations.

1 10. The computer readable medium recited in claim 7,
2 said schema being based on Extensible Markup Language (XML), and wherein the
3 schema models the service level contract.

1 11. The computer readable medium recited in claim 7, further comprising instructions for
2 performing the steps of:
3 generating, at a server, interface data for defining the schema for monitoring the
4 service level contract; and
5 communicating the interface data to a client that is remote from said server, wherein
6 the interface data allows users to configure specific times for monitoring the
7 level of service that is being provided by the service provider, and to configure
8 the set of one or more threshold values associated with each metric test.

1 12. The computer readable medium recited in claim 7, wherein:
2 the one or more agents configure the devices to perform the one or more metric tests
3 only within the specific time range.

1 13. A network device configured for monitoring a level of network service provided by a
2 service provider, comprising:
3 a network interface;
4 a processor coupled to the network interface and receiving information from the
5 network interface;
6 a computer-readable medium accessible by the processor and comprising one or more
7 sequences of instructions which, when executed by the processor, cause the
8 processor to carry out the steps of:
9 receiving a schema that provides a configuration for monitoring a service level
10 contract between the service provider and a particular customer,
11 wherein the schema comprises:
12 data defining one or more metric tests for monitoring the level of
13 network service being provided to the particular customer by
14 the service provider, each said metric test measuring a level of
15 service of a particular type of network operation, and including
16 a set of one or more threshold values that define a range of
17 acceptable values for the particular type of network operation,
18 and
19 information defining a specific time range for when the one or more
20 metric tests are to be performed; and
21 distributing the one or more metric tests to one or more agents, wherein the
22 one or more agents configure devices associated with the network to
23 perform the one or more metric tests during the specific time range and

1 receive result information from the devices performing the one or more
2 metric tests.

1 14. The network device recited in claim 13, wherein the sequence of instructions further
2 comprises instructions that cause the one or more processors to:
3 for each metric test defined in the schema, determine whether result information for
4 that metric test is within the range of acceptable values defined by the set of
5 one or more threshold values included with that metric test; and
6 create and store reporting information that indicates whether the customer is actually
7 receiving, during the specific time range, the level of network service offered
8 by the service provider in the service level contract, said reporting information
9 based on said determinations.

1 16. The network device recited in claim 13,
2 said schema being based on Extensible Markup Language (XML), and wherein the
3 schema models the service level contract.

1 17. The network device recited in claim 13, wherein the sequence of instructions further
2 comprises the steps of:
3 generating, at a server, interface data for defining the schema for monitoring the
4 service level contract; and
5 communicating the interface data to a client that is remote from said server, wherein
6 the interface data allows users to configure specific times for monitoring the

7 level of service that is being provided by the service provider, and to configure
8 the set of one or more threshold values associated with each metric test.

1 18. The network device recited in claim 13, wherein:
2 the one or more agents configure the devices to perform the one or more metric tests
3 only within the specific time range.

1 19. A network device configured for monitoring a level of network service provided by a
2 service provider, comprising:
3 means for receiving a schema that provides a configuration for monitoring a service
4 level contract between the service provider and a particular customer, wherein
5 the schema comprises:
6 data defining one or more metric tests for monitoring the level of network
7 service being provided to the particular customer by the service
8 provider, and a set of one or more threshold values included with each
9 of the one or more metric tests, and
10 information defining a specific time range for when the one or more metric
11 tests are to be performed; and
12 means for distributing the one or more metric tests to one or more agents, wherein the
13 one or more agents configure devices associated with the network to perform
14 the one or more metric tests during the specific time range and receive result
15 information from the devices performing the one or more metric tests.

1 20. The network device recited in claim 19, further including:

2 for each metric test defined in the schema, means for determining whether result
3 information for that metric test is within the range of acceptable values defined
4 by the set of one or more threshold values included with that metric test; and
5 means for creating and storing reporting information that indicates whether the
6 customer is actually receiving, during the specific time range, the level of
7 network service offered by the service provider in the service level contract,
8 said reporting information based on said determinations.

1 21. The method recited in claim 1, wherein the range of threshold values included with a
2 particular metric test is configured according to a level of performance specified in a
3 service level agreement for the type of network operation measured by the particular
4 metric test.